[4910-13-U]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [65 FR 49735 8/15/2000]

[Docket No. 2000-NM-49-AD; Amendment 39-11865; AD 2000-13-03 R1]

RIN 2120-AA64

Airworthiness Directives; McDonnell Douglas Model DC-8 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; correction.

SUMMARY: This document corrects information in an existing airworthiness directive (AD) that applies to certain McDonnell Douglas Model DC-8 series airplanes that have been converted from a passenger to a cargo-carrying ("freighter") configuration. That AD currently requires a revision to the Airplane Flight Manual Supplement to ensure that the main deck cargo door is closed, latched, and locked; inspection of the door wire bundle to detect discrepancies and repair or replacement of discrepant parts. That AD also requires, among other actions, modification of the hydraulic and indication systems of the main deck cargo door, and installation of a means to prevent pressurization to an unsafe level if the main deck cargo door is not closed, latched, and locked. This document corrects an error that resulted in the omission of a note, which informs operators of an alternative approved means of compliance for certain requirements. This correction is necessary to ensure operators are informed of this approved means of compliance.

EFFECTIVE DATE: August 1, 2000.

FOR FURTHER INFORMATION CONTACT: Michael E. O'Neil, Aerospace Engineer, Airframe Branch, ANM-120L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5320; fax (562) 627-5210.

SUPPLEMENTARY INFORMATION: On June 21, 2000, the Federal Aviation Administration (FAA) issued AD 2000-13-03, amendment 39-11802 (65 FR 39539, June 27, 2000), which applies to certain McDonnell Douglas Model DC-8 series airplanes that have been converted from a passenger to a cargo-carrying ("freighter") configuration. That AD requires a revision to the Airplane Flight Manual Supplement to ensure that the main deck cargo door is closed, latched, and locked; inspection of the door wire bundle to detect discrepancies and repair or replacement of discrepant parts. That AD also requires, among other actions, modification of the hydraulic and indication systems of the main deck cargo door, and installation of a means to prevent pressurization to an unsafe level if the main deck cargo door is not closed, latched, and locked. That AD was prompted by the FAA's determination that certain main deck cargo door systems do not provide an adequate level of safety, and that there is no means to prevent pressurization to an unsafe level if the main deck cargo door is not closed, latched, and locked. The actions required by that AD are intended to prevent opening of the cargo door while the airplane is in flight, and consequent rapid decompression of the airplane including possible loss of flight control or severe structural damage.

Need for the Correction

The FAA inadvertently omitted a note in the final rule that reads, "[i]nstallation of National Aircraft Service, Inc. (NASI) Vent Door System STC ST01244CH, is an approved means of compliance with the requirements of paragraph (c) of this AD." Therefore, the FAA has determined that a correction to AD 2000-13-03 is necessary to inform operators of this approved means of compliance.

Correction of Publication

This document corrects the error and correctly adds the AD as an amendment to section 39.13 of the Federal Aviation Regulations (14 CFR 39.13).

The AD is reprinted in its entirety for the convenience of affected operators. The effective date of the AD remains August 1, 2000.

Since this action only corrects, it has no adverse economic impact and imposes no additional burden on any person. Therefore, the FAA has determined that notice and public procedures are unnecessary.

List of Subject in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

Adoption of the Correction

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Corrected]

2. Section 39.13 is amended by correctly adding the following airworthiness directive (AD):

AIRWORTHINESS DIRECTIVE

REGULATORY SUPPORT DIVISION
P.O. BOX 26460
OKLAHOMA CITY, OKLAHOMA 73125-0460

U.S. Department
of Transportation
**Federal Aviation
Administration**

AD's are posted on the internet at http://av-info.faa.gov

REVISION Issued August 2000

2000-13-03 R1 MCDONNELL DOUGLAS: Amendment 39-11865. Docket 2000-NM-49-AD.

Applicability: Model DC-8 series airplanes that have been converted from a passenger to a cargo-carrying ("freighter") configuration in accordance with Supplemental Type Certificate (STC) SA1063SO; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (e) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent opening of the cargo door while the airplane is in flight, and consequent rapid decompression of the airplane including possible loss of flight control or severe structural damage, accomplish the following:

Actions Addressing the Main Deck Cargo Door

(a) Within 60 days after the effective date of this AD, accomplish a general visual inspection of the wire bundle of the main deck cargo door between the exit point of the cargo liner and the attachment point on the main deck cargo door to detect crimped, frayed, or chafed wires; and perform a general visual inspection for damaged, loose, or missing hardware mounting components. If any crimped, frayed, or chafed wire, or damaged, loose, or missing hardware mounting component is detected, prior to further flight, repair in accordance with FAA-approved maintenance procedures.

NOTE 2: For the purposes of this AD, a general visual inspection is defined as "A visual examination of an interior or exterior area, installation, or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or drop-light, and may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to gain proximity to the area being checked."

(b) Within 60 days after the effective date of this AD, revise the Limitations Section of the appropriate FAA-approved Airplane Flight Manual Supplement (AFMS) for STC SA1063SO by inserting therein procedures to ensure that the main deck cargo door is fully closed, latched, and locked prior to dispatch of the airplane, and install any associated placards. The AFMS revision procedures and installation of any associated placards shall be accomplished in accordance with a method approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate.

Actions Addressing the Main Deck Cargo Door Systems

(c) Within 18 months after the effective date of this AD, accomplish the actions specified in paragraphs (c)(1), (c)(2), (c)(3), (c)(4), and (c)(5) of this AD in accordance with a method approved by the Manager, Los Angeles ACO.

(1) Modify the indication system of the main deck cargo door to indicate to the pilots whether the main deck cargo door is fully closed, latched, and locked;

(2) Modify the mechanical and hydraulic systems of the main deck cargo door to eliminate detrimental deformation of elements of the door latching and locking mechanism;

(3) Install a means to visually inspect the locking mechanism of the main deck cargo door;

(4) Install a means to remove power to the door while the airplane is in flight;

(5) Install a means to prevent pressurization to an unsafe level if the main deck cargo door is not fully closed, latched, and locked.

NOTE 3: Installation of National Aircraft Service, Inc. (NASI) Vent Door System STC ST01244CH, is an approved means of compliance with the requirements of paragraph (c) of this AD.

(d) Compliance with paragraphs (c)(1), (c)(2), (c)(3), (c)(4), and (c)(5) of this AD constitutes terminating action for the requirements of paragraphs (a) and (b) of this AD, and the AFMS revision and placards may be removed.

Alternative Methods of Compliance

(e) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

NOTE 4: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

Special Flight Permit

(f) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Effective Date

(g) The effective date of this amendment remains August 1, 2000.

FOR FURTHER INFORMATION CONTACT: Michael E. O'Neil, Aerospace Engineer, Airframe Branch, ANM-120L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5320; fax (562) 627-5210.

Issued in Renton, Washington, on August 9, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

APPENDIX 1

Excerpt from an FAA Memorandum to Director-Airworthiness and Technical Standards of ATA, dated March 20, 1992

"(1) **Indication System:**

(a) The indication system must monitor the closed, latched, and locked positions, directly.

(b) The indicator should be amber unless it concerns an outward opening door whose opening during takeoff could present an immediate hazard to the airplane. In that case the indicator must be red and located in plain view in front of the pilots. An aural warning is also advisable. A display on the master caution/warning system is also acceptable as an indicator. For the purpose of complying with this paragraph, an immediate hazard is defined as significant reduction in controllability, structural damage, or impact with other structures, engines, or controls.

(c) Loss of indication or a false indication of a closed, latched, and locked condition must be improbable.

(d) A warning indication must be provided at the door operators station that monitors the door latched and locked conditions directly, unless the operator has a visual indication that the door is fully closed and locked. For example, a vent door that monitors the door locks and can be seen from the operators station would meet this requirement.

(2) **Means to Visually Inspect the Locking Mechanism:**

There must be a visual means of directly inspecting the locks. Where all locks are tied to a common lock shaft, a means of inspecting the locks at each end may be sufficient to meet this requirement provided no failure condition in the lock shaft would go undetected when viewing the end locks. Viewing latches may be used as an alternate to viewing locks on some installations where there are other compensating features.

(3) **Means to Prevent Pressurization:**

All doors must have provisions to prevent initiation of pressurization of the airplane to an unsafe level, if the door is not fully closed, latched and locked.

(4) **Lock Strength:**

Locks must be designed to withstand the maximum output power of the actuators and maximum expected manual operating forces treated as a limit load. Under these conditions, the door must remain closed, latched and locked.

(5) **Power Availability:**

All power to the door must be removed in flight and it must not be possible for the flight crew to restore power to the door while in flight.

(6) **Powered Lock Systems:**

For doors that have powered lock systems, it must be shown by safety analysis that inadvertent opening of the door after it is fully closed, latched and locked, is extremely improbable."